

## ABSTRACT OF THE DISCLOSURE

In order to perform synchronization detection with high speed, high precision and high reliability and to  
5 measure communication quality (propagation characteristics) at high precision and high efficiency, a mobile station includes synchronization detecting portion for detecting synchronization chip timing of channel to be measured, a synchronization chip timing  
10 information portion accumulating information of detected synchronization chip timing, a correlation detecting portion deriving a correlation value between spreading code of the channel to be measured and a received signal for performing communication with a base station and  
15 measurement of communication quality with taking the detected synchronization chip timing as a reception chip timing, a time series generating portion for generating a time series data of received signal vector after correlation detection, and a communication quality  
20 calculating portion for calculating communication quality from generated time series data.